

ICF-S14

SERVICE MANUAL

US Model



SPECIFICATIONS

Frequency range	FM: 87.6 - 108 MHz AM: 530 - 1,605 kHz
Antennas	FM: Telescopic antenna AM: Built-in ferrite bar antenna
Speaker	Approx. 5.7cm(2 1/4 inches) dia.
Power output	100 mW (at 10% harmonic distortion)
Power requirements	3V DC, two R6(size AA) batteries
Battery life	Approx. 30 hours of listening (for four hours a day at a normal volume), using Sony SUM-3(NS) batteries
Dimensions	Approx. 69 x 120 x 335 mm (w/h/d) (2 3/4 x 4 3/4 x 1 3/8 inches)
Weight	Approx. 210 g (7.4 oz.) incl. batteries

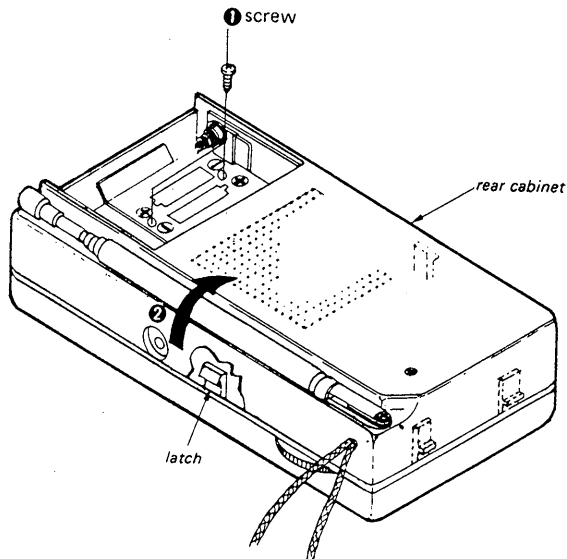
Design and specifications subject to change without notice.

FM/AM 2BAND RECEIVER
SONY®

SECTION 1 DISASSEMBLY

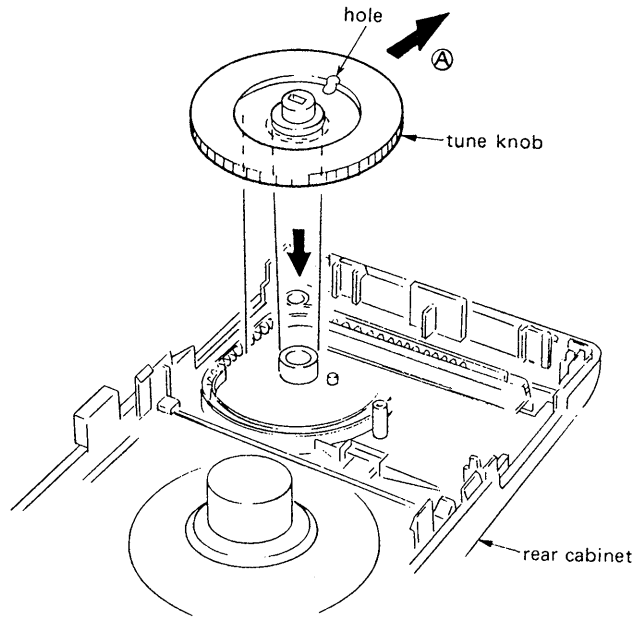
1-1. REAR CABINET REMOVAL

Note: Follow the disassembly procedure in the numerical order given.



Release the latch by opening the rear cabinet in the direction of arrow 2.

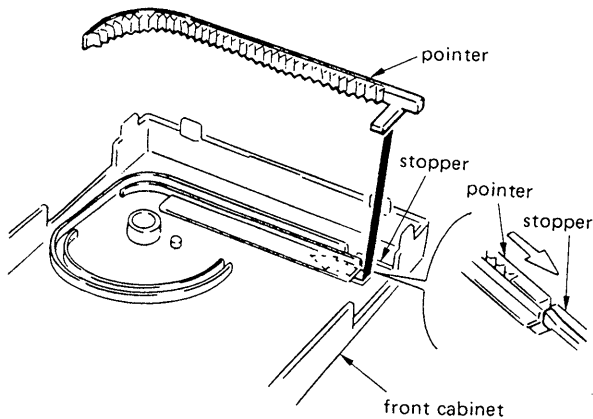
1-3. TUNE KNOB INSTALLATION



Set the hole of tune knob in the direction of arrow A and install it to rear cabinet.

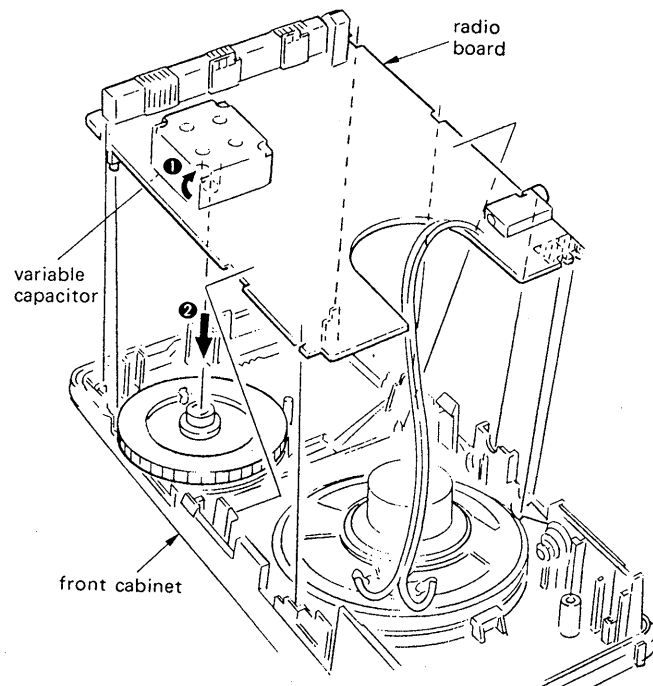
1-2. POINTER SETTING

Slide the pointer to reach the stopper.



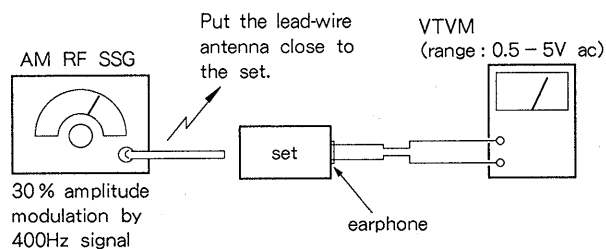
1-4. RADIO BOARD INSTALLATION

- 1 Turn the variable capacitor fully in the direction of arrow.
- 2 Install radio board to the front cabinet.



SECTION 2 ADJUSTMENTS

AM SECTION



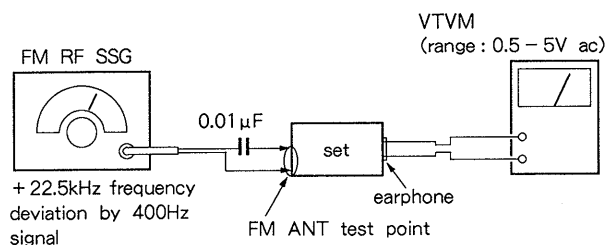
Repeat the procedure in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

AM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L4	CT3
520kHz	1,650kHz

AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L2	CT1
620kHz	1,400kHz

AM IF ALIGNMENT	
Adjust for a maximum reading on VTVM.	
T1	
455kHz	

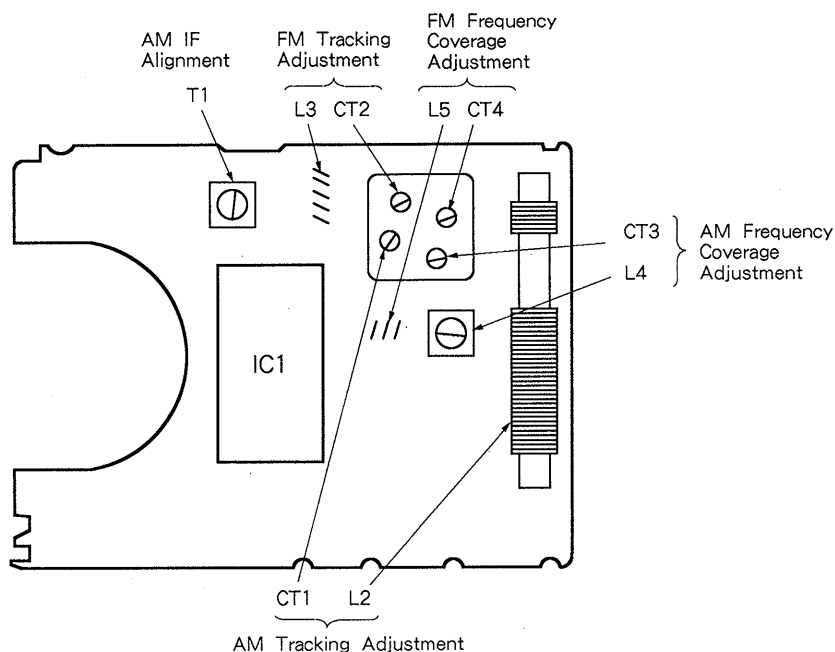
FM SECTION



Repeat the procedure in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

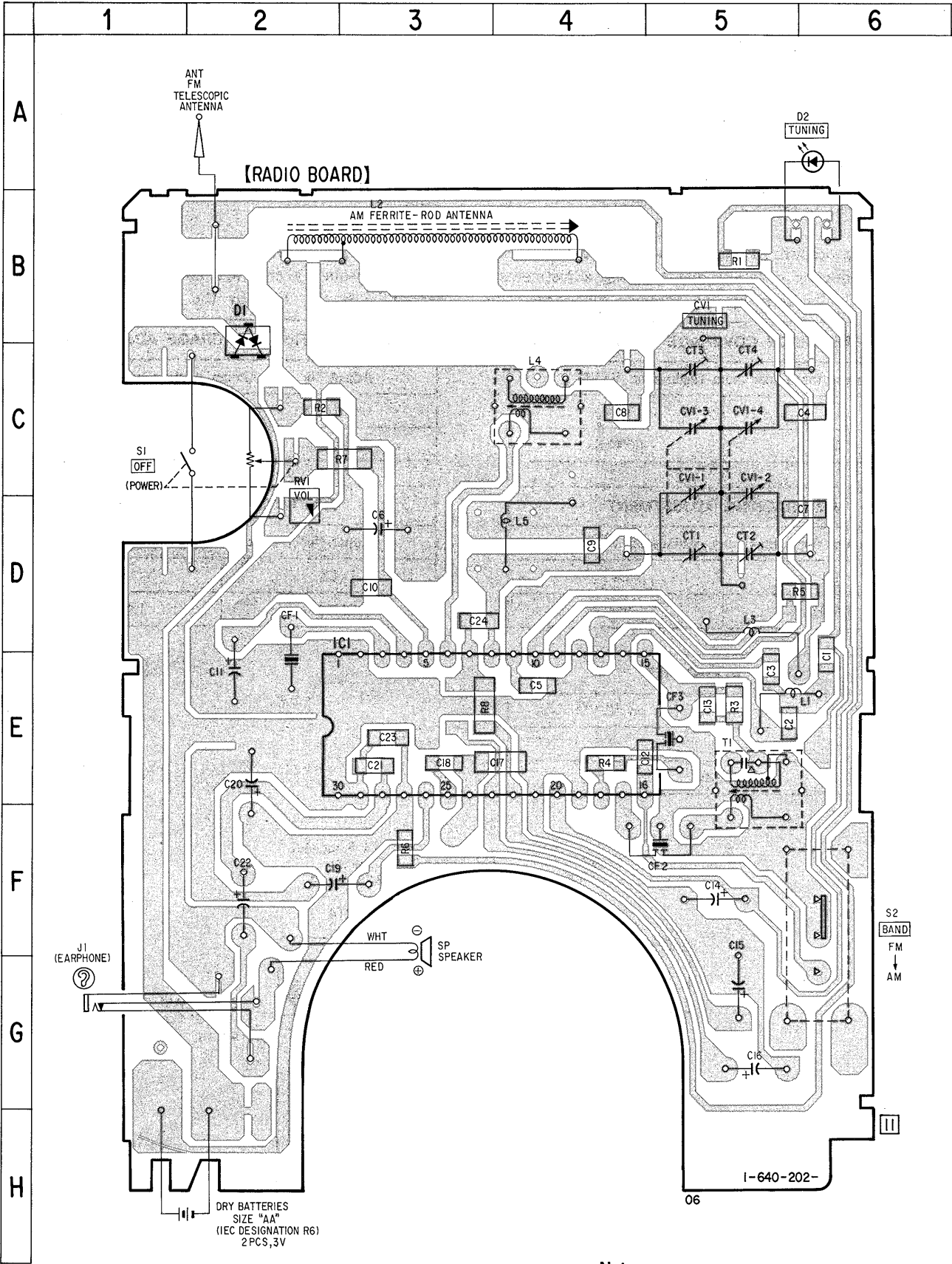
FM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L5	CT4
86.5MHz	109.5MHz

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L3	CT2
86.5MHz	109.5MHz



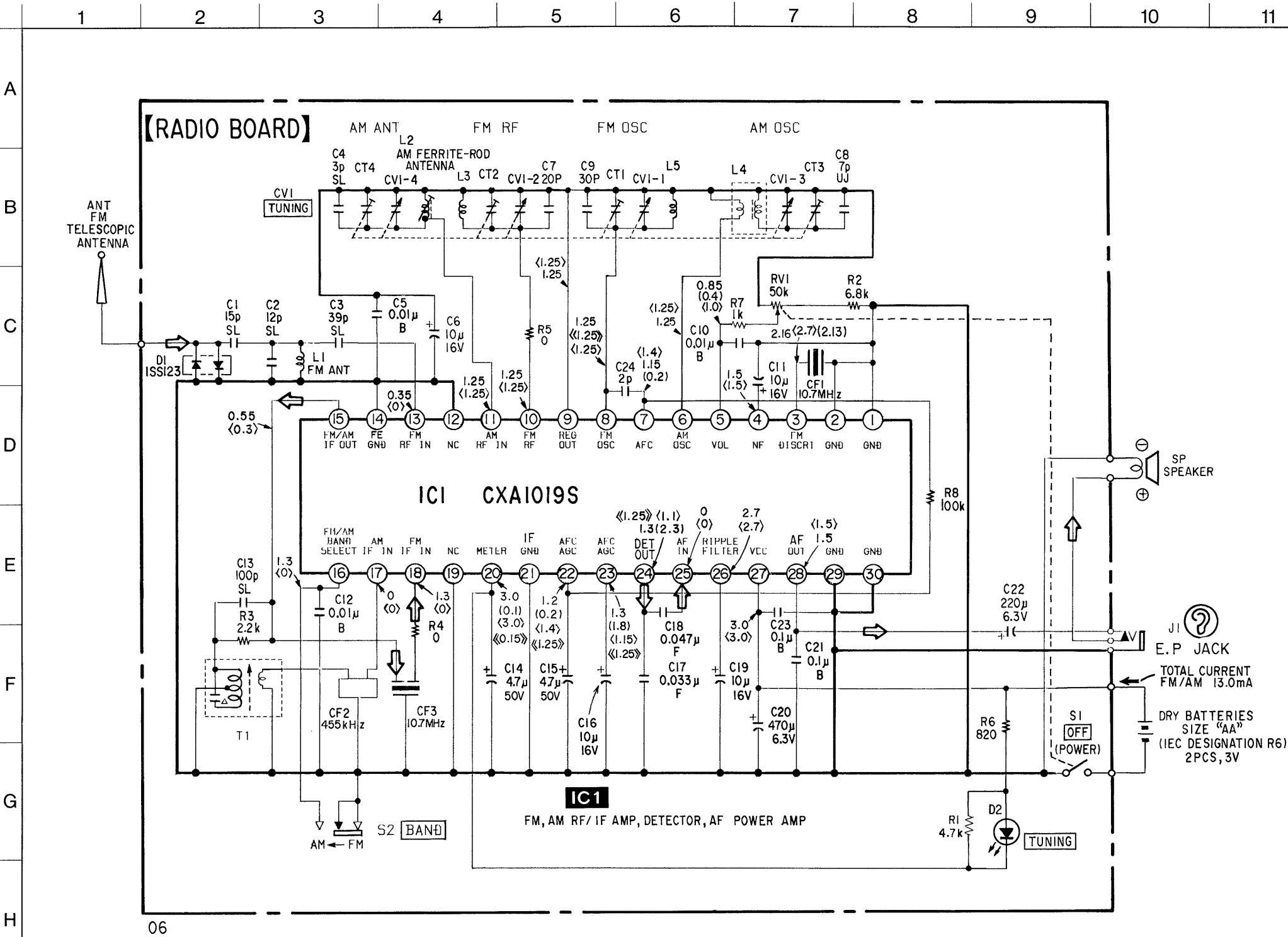
SECTION 3
DIAGRAMS

3-1. PRINTED WIRING BOARD

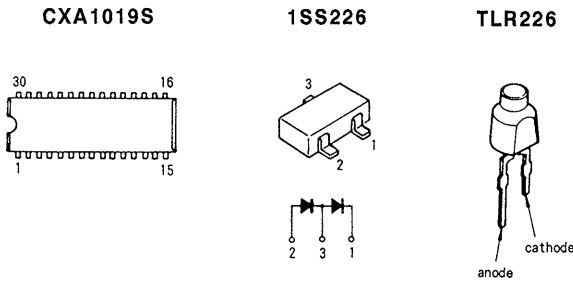


Note:
• — : parts extracted from the component side.

3-2. SCHEMATIC DIAGRAM



3-3. SEMICONDUCTOR LEAD LAYOUTS.



- Note:**
- All capacitors are in μF unless otherwise noted. pF : $\mu\mu\text{F}$
50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
 - Δ : internal component.
 - Voltage are dc with respect to ground unless otherwise noted.
 - Readings are taken under detuned conditions with a VOM (50k Ω /V).
 - no mark: FM detuned
(): FM tuned
< >: AM detuned
<>>: AM tuned
 - Voltage variations may be noted due to normal production tolerances.
 - Signal path.
⇒: FM
 - Switches:

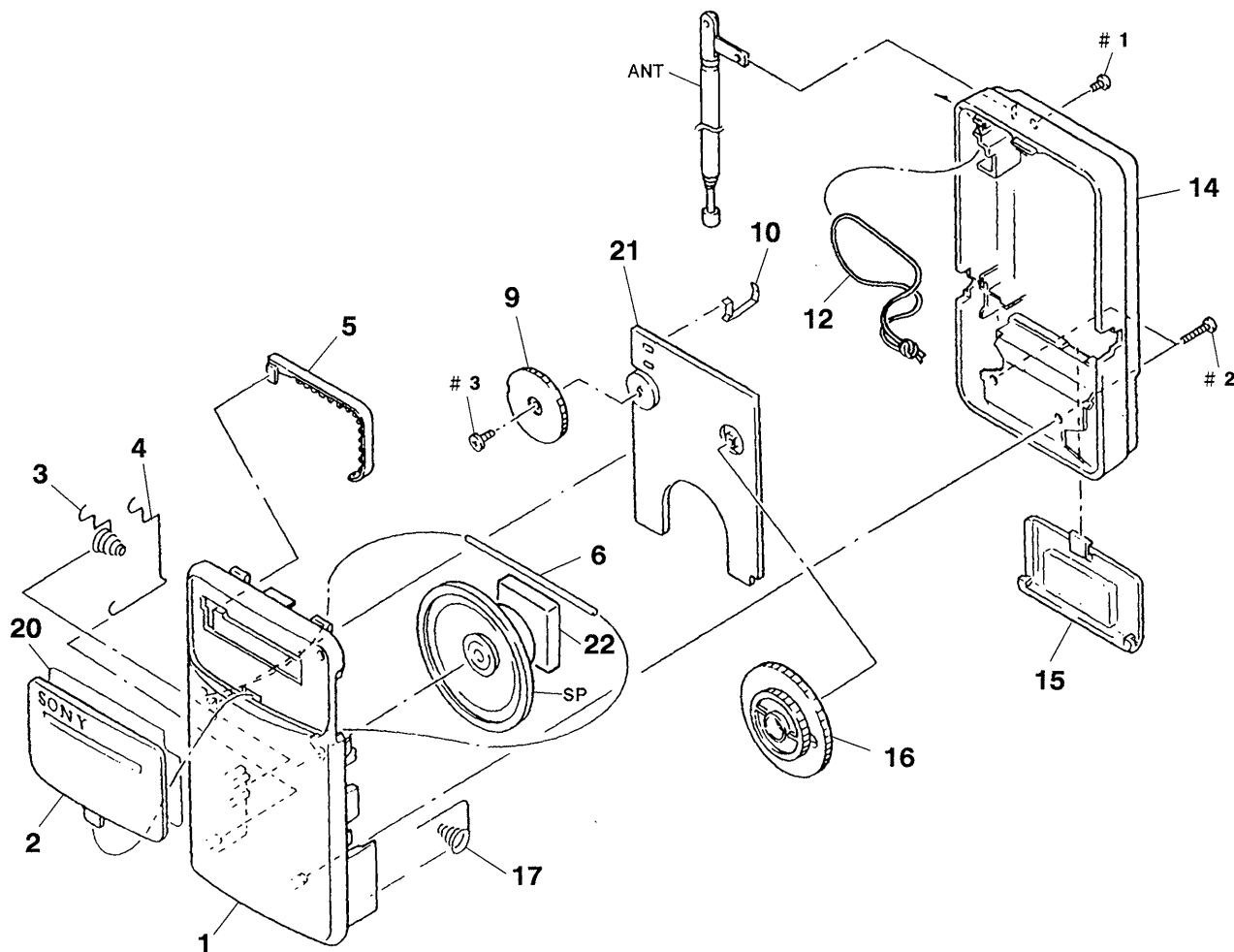
Ref. No.	Switch	Position
S1	POWER	OFF
S2	BAND	FM

SECTION 4 EXPLODED VIEW

NOTE:

- -XX,-X mean standardized parts, so they may have some difference from the original one.
- Color indication of Appearance Parts.
Example:
KNOB,BALANCE (WHITE) ... (RED)
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.

↑ ↑
 Parts Cabinet's
 Color Color



Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
1	3-903-419-01	CABINET (FRONT)		14	3-369-874-21	CABINET (REAR)	
2	3-369-878-01	SCALE, DIAL		15	X-3363-538-1	ASSY, BATTERY CASE	
3	3-903-415-01	TERMINAL, PLUS		16	3-903-411-01	KNOB (TUNING)	
4	3-364-778-01	SPRING, MINUS		17	3-903-414-01	TERMINAL, MIDWAY	
5	3-369-877-01	POINTER		20	3-903-417-01	SHEET, ADHESIVE	
* 6	3-903-416-01	SPRING, SPEAKER RETAINER		* 21	A-3679-357-A	RADIO BOARD, COMPLETE	
9	3-893-375-01	KNOB, VOL		22	3-831-441-11	CUSHION	
* 10	3-893-369-01	TERMINAL, ANT		ANT	1-501-247-31	ANTENNA, TELESCOPIC	
12	3-893-381-01	STRAP, HAND		SP	1-503-616-11	SPEAKER	

SECTION 5 ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the part specified in the diagrams or the components used on the set.
- -XX,-X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms
METAL : Metal-film resistor
METAL OXIDE : Metal Oxide-film resistor
F : nonflammable

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u : μ , for example :
uA... : μ A..., uPA... : μ PA...,
uPB... : μ PB..., uPC... : μ PC...,
uPD... : μ PD...
- CAPACITORS
uF : μ F
- COILS
uH : μ H

When indicating parts by reference number, please include the board name.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-3679-357-A	RADIO BOARD, COMPLETE *****				< FILTER >	
	3-893-375-01	KNOB, VOL		CF1	1-567-097-61	FILTER, CERAMIC 10.7MHz	
*	3-893-369-01	TERMINAL, ANT		CF2	1-527-870-00	FILTER 455KHz	
	7-627-552-47	SCREW, PRECISION +P 1.7X4		CF3	1-567-097-61	FILTER, CERAMIC 10.7MHz	
		< CAPACITOR >				< TRIMMER >	
C1	1-163-097-00	CERAMIC CHIP 15PF	5% 50V	CT1-4 } CV1-4 }	1-151-691-11	CAP, VAR (FM/AM)	
C2	1-163-095-00	CERAMIC CHIP 12PF	5% 50V			< DIODE >	
C3	1-163-107-00	CERAMIC CHIP 39PF	5% 50V	D1	8-719-800-76	DIODE 1SS226	
C4	1-163-086-00	CERAMIC CHIP 3PF	50V	D2	8-719-812-26	LED TLR226 (TUNING)	
C5	1-164-232-11	CERAMIC CHIP 0.01uF	50V			< IC >	
C6	1-126-964-11	ELECT 10uF	20% 16V	IC1	8-752-035-29	IC CXA1019S	
C7	1-163-100-00	CERAMIC CHIP 20PF	5% 50V			< JACK >	
C8	1-163-090-00	CERAMIC CHIP 7PF	50V	J1	1-507-952-11	JACK	
C9	1-163-104-00	CERAMIC CHIP 30PF	5% 50V			< COIL >	
C10	1-164-232-11	CERAMIC CHIP 0.01uF	50V	* L1	1-422-326-11	COIL, AIR-CORE (FM ANT)	
C11	1-126-964-11	ELECT 10uF	20% 16V	L2	1-402-545-11	ANTENNA, FERRITE-ROD (MW)	
C12	1-164-232-11	CERAMIC CHIP 0.01uF	50V	* L3	1-422-320-11	COIL, AIR-CORE	
C13	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	L4	1-406-028-00	COIL, OSC (MW)	
C14	1-124-927-11	ELECT 4.7uF	20% 100V	L5	1-422-341-11	COIL, AIR-CORE	
C15	1-124-927-11	ELECT 4.7uF	20% 100V			< RESISTOR >	
C16	1-126-964-11	ELECT 10uF	20% 16V	R1	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
C17	1-163-074-00	CERAMIC CHIP 0.033uF	50V	R2	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	
C18	1-163-035-00	CERAMIC CHIP 0.047uF	50V	R3	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
C19	1-126-964-11	ELECT 10uF	20% 16V	R4	1-216-295-00	METAL CHIP 0 5% 1/10W	
C20	1-124-472-11	ELECT 470uF	20% 10V	R5	1-216-295-00	METAL CHIP 0 5% 1/10W	
C21	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V				
C22	1-126-176-11	ELECT 220uF	20% 10V				
C23	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V				
C24	1-163-085-00	CERAMIC CHIP 2PF	50V				

REVISED

RADIO

Ref. No.	Part No.	Description	Remark
R6	1-216-047-00	METAL CHIP 820 5%	1/10W
R7	1-216-198-00	METAL CHIP 1K 5%	1/8W
R8	1-216-246-91	METAL GLAZE 100K 5%	1/8W

< SWITCH >

S1 } RV1 }	1-237-594-11	RES, VAR, CARBON (WITH S) 50K (OFF)
S2	1-552-370-00	SWITCH, SLIDE (BAND)

< TRANSFORMER >

T1	1-404-341-00	TRANSFORMER, IF
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MISCELLANEOUS

ANT	1-501-247-31	ANTENNA, TELESCOPIC
SP	1-503-616-11	SPEAKER

ACCESSORIES & PACKING MATERIALS



3-904-938-02	CARD, BOARD (ENGLISH)
	(Including the Instruction manual)

*	3-904-937-01	CUSHION
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HARDWARE LIST

#1	7-621-772-08	SCREW +B 2X3
#2	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S
#3	7-627-552-47	SCREW, PRECISION +P 1.7X4

